

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)	
Matti Hamalainen et al.)	Group Art Unit: 1793
Application No.: 10/511,382)	Examiner: Jie Yang
Filed: October 14, 2004)	Appeal No.: _____
For: METHOD FOR THE RECOVERY)	
OF GOLD)	
)	
)	

REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants respectfully submit herewith a Reply Brief in accordance with 37 C.F.R. § 41.41, directed to new points of argument raised in the Examiner's Answer dated July 20, 2009.

STATUS OF CLAIMS

The status of the claims is as set forth on page 2 of the Appeal Brief.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal are as stated at page 3 of the Appeal Brief.

ARGUMENT

- I. The Office's reliance on the alleged disclosure of "Cuprex Process" in Everett shows that Everett does not anticipate claims 1-2, 4-5, 7, and 9-11 under 35 U.S.C. § 102(b).

During the prosecution of this application, the Office issued four (4) Office actions relying upon the Everett reference in an anticipation rejection, and held a "Pre-Appeal Brief Review." In each case, Appellants' challenged the sufficiency of the disclosure of Everett to anticipate Appellants' claims. In each case, the Office had ample opportunity to assess the appropriateness of its rejections and the sufficiency of its development of the issues. Despite all of this, the Office relies, for the first time in the Examiner's Answer, on the alleged disclosure of a "Cuprex Process" by Everett in making its anticipation rejection. The Office provides no explanation for why it has waited until the Examiner's Answer to explain what appears to be a critical portion of its rationale.

More particularly, the Office, for the first time in the Examiner's Answer, asserts that

U.S. '819 also teaches the existing Cuprex Process involving leaching a copper concentrate with ferric chloride solution, solvent extraction of the ferric chloride solution, scrubbing, stripping and then electrolysis to produce copper. (Col. 2, lines 3-7 of US '819); US '819 teaches adding only NaCl in the solution (Fig. 4 Curve 2 and Col. 8, lines 47-61 of US '819); and the appellant has not shown that the introduction of additional halide would materially change the characteristic of applicants invention.

Examiner's Answer at page 6, line 15 to page 7, line 3 (emphasis added).

The Examiner's Answer goes on to state, again for the first time:

Regarding the appellant's argument A) and B), the Examiner

disagrees with the appellant's arguments because firstly, as pointed [out] in the rejection for the instant claim 1, though US'819 prefers that the electrolyte includes two or more halides, US'819 also teaches the existing Cuprex Process involving leaching a copper concentrate with ferric chloride solution, solvent extraction of the ferric chloride solution, scrubbing, stripping and then electrolysis to produce copper (Col.2, lines 3-7 of US'819); US'819 teaches adding only NaCl in the solution (Fig.4 Curve 2 and Col.8, lines 47-61 of US'819); and the appellant has not shown that the introduction of additional halide would materially change the characteristics of applicant's invention.

Examiner's Answer at page 11, line 10 to page 12, line 8 (emphasis added).

The Office's reliance on the alleged description of the "Cuprex Process" in Everett makes even more clear the absence of any anticipation of Appellants' claims by Everett. This description of the "Cuprex Process" occurs in the context of Everett's description of "Background Art." Everett states, in pertinent part:

Processes are known for the treatment of minerals containing one or two metals of particular interest for removal of the metal(s). These processes become extremely costly and complex to operate when treating minerals having complex compositions. Furthermore the attaining of product purity is also more difficult when the mineral has a complex composition or contains many contaminants.

A major problem today (and in the future) relates to the disposal of waste and by-products resulting from the existing treatment of minerals for metal recovery. For sulfur containing minerals, this problem is exacerbated in that a typical by-product is sulfur either in the form of sulfur dioxide gas or sulfuric acid. Enormous atmospheric emission problems stem from the production of sulfur dioxide (including acid rain) and it has been usual to reclaim sulfur dioxide by producing sulfuric acid. However, sulfuric acid is so prevalent that many producers have actually been required to incur cost for its removal from site.

Given the problems of the high level of waste and by-products from the treatment of minerals, and more particularly to the by-production of sulfur dioxide/sulfuric acid, attempts have been made to develop processes wherein the disposal and/or reclaiming of by-products is simplified.

Everett, at column 1, lines 23-45. Against this background, Everett describes several different prior art processes, including the "Cuprex Process," and notes their

deficiencies. With specific regard to the "Cuprex Process," Everett states:

Another existing process is the Cuprex Process. The Cuprex process involves leaching a copper concentrate with ferric chloride solution, solvent extraction of the ferric chloride solution, scrubbing, stripping and then electrolysis to produce copper. The Cuprex process is an expensive process, having a high power consumption, high capital and operating costs and is overall a complex procedure to operate. Furthermore, products such as gold must be removed using existing methods which have undesirable side effects.

Everett, at column 2, lines 3-12 (emphasis added). Everett concludes this description of the prior art processes by contrasting them with the process invented by Everett:

It would be advantageous if at least preferred forms of the present invention ameliorated the deficiencies of the prior art or, at the very least, provided an effective alternative to prior art processes.

Everett at column 2, lines 13-16. Clearly, the "Cuprex Process" referenced by Everett is an embodiment of a process that is prior art to the process of Everett, and is distinctly different therefrom.

In order for Everett to anticipate Appellants' claims, Everett must disclose, within its four corners, every feature or element of Appellants' claims arranged as recited in the claims. See *Net Money/IN Inc. v. VeriSign Inc.*, 545 F.3d 1359, 88 USPQ2d 1751; *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983); *In re Arkley*, 455 F.2d 586, 172 USPQ 524 (CCPA 1972).

By making the statements in the Examiner's Answer quoted above, the Office has relied upon various portions of the "inventive" process disclosed in Everett, and combined these portions of Everett with the disclosure of the "Cuprex Process," which Everett clearly regards as a prior art embodiment, different from that of Everett's invention. Appellants respectfully submit that this reliance by the Office

makes clear that the Office has not shown that Everett discloses an embodiment of a process containing every element of the process recited in Appellants' claims, arranged as recited in Appellants' claims.

To the contrary, the Office has selectively chosen from among the features of various embodiments of the "inventive" process of Everett, and has combined these selected features with features selected from Everett's description of the prior art "Cuprex Process." In doing so, the Office has ignored the distinctions between Everett's description of the "Cuprex Process" and Everett's description of his own process, namely that the "Cuprex Process" is inferior to Everett's own process in several respects. Under these circumstances, it seems clear that the "Cuprex Process" as described by Everett and Everett's own process are completely different, mutually exclusive embodiments. It is therefore incorrect for the Office to select features of each, and combine them in a rejection for anticipation.

In the *Net Money/IN* case, a reference disclosed two separate protocols, neither of which contained each element arranged as recited in the claims at issue. The reference was found not to anticipate because, even though the protocols were both found within the four corners of a single reference, it was not proper to combine their features to arrive at the claimed invention. Similarly, here the Office has combined the alleged inventive embodiments disclosed in a reference with separate embodiments drawn from the prior art which the reference purports to distinguish over. As in the *Net Money/IN* case, such a combination cannot form the basis of an anticipation rejection, which "must clearly and unequivocally disclose the claimed [invention] or direct those skilled in the art to the [invention] without any need for picking, choosing, and combining various disclosures not directly related to each

other by the teachings of the cited reference." See *In re Arkley*, 455 F.2d at 587.

Accordingly, for the reasons given herein and in the Appeal Brief, Appellants respectfully submit that the Office has failed to show that Everett anticipates claims 1-2, 4-5, 7, and 9-11 under 35 U.S.C. § 102(b), and that this rejection should be reversed.

- II. The Office's citation of the Cuprex Process disclosure in Everett does not render claims 3, 6, and 8 (or any other claims) obvious under 35 U.S.C. § 103(a).

With regard to the Office's contention in the Examiner's Answer that an electrolyte containing two or more halides is merely a "preference" of Everett, Appellants note that this position is contradicted by the numerous instances where Everett stresses the importance of a hallex electrolyte, quoted extensively in the Appeal Brief. The use of hallex is more than simply a preferred embodiment of Everett; it is of fundamental importance to achieving the aims of Everett's invention. Moreover, other than the reference to the "Cuprex Process" noted above, the Office has identified no suggestion in Everett that the process disclosed therein should use a single halide. In this regard, Appellants note that Curve 2 in Figure 4 does not constitute such a teaching, since NaBr is added to stop chlorine gas evolution, so that the result is a solution containing both chloride and bromide. This hardly constitutes a teaching or suggestion to eliminate bromine from an electrolyte in a gold leaching process.

Appellants respectfully submit that a worker having ordinary skill in this art would not have been motivated to ignore the extensive teachings of Everett about the importance of using a hallex electrolyte and instead use the ferric chloride solution of the "Cuprex Process" when Everett itself states that the "Cuprex Process"

is expensive, has a high power consumption, has high capital and overhead costs, is complex to operate, and requires methods having undesirable side effects to recover gold. In short, Everett teaches away from using the Cuprex Process, and it is inappropriate for the Office to pick and choose only selected features of Everett's description of the Cuprex Process while ignoring the portions of Everett's disclosure that teach away from using such a process. Even the MPEP recognizes this principle. See MPEP § 2141.03(VI). Appellants submit that the teachings of Everett about the disadvantages of the "Cuprex Process" must be considered against the backdrop of Everett's description of the advantages of using a hallex electrolyte as disclosed in Everett's process. When this is done, it is clear that no worker having ordinary skill in this art would have reasonably expected to successfully leach gold using a ferric chloride solution as disclosed in Everett's description of the Cuprex Process.

Appellants submit that, under these circumstances, the Office has failed to establish a *prima facie* case of obviousness of claims 3, 6, and 9, even when the most recent iteration of the Office's position regarding the disclosure of Everett is considered. Accordingly, for the reasons given herein and in the Appeal Brief, this rejection should be reversed.

CONCLUSION

Appellants submit that the Office's new points of argument raised in the Examiner's Answer do not support its positions regarding the patentability of Appellants' claims; to the contrary, these points of argument support Appellants' contentions that the Office's rejections are in error and should be reversed.

Respectfully submitted,

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